

RECEIVED

SEP 26 2000

TECH CENTER 1600/2900

H 8  
1641  
Law SectionRAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/534,825ADATE: 09/25/2000  
TIME: 11:22:28Input Set : A:\419c7.app  
Output Set: N:\CRF3\09252000\I534825A.raw

3 <110> APPLICANT: Frudakis, Tony N.  
 4 Smith, John M.  
 5 Reed, Steven G.  
 6 Misher, Lynda  
 7 Retter, Marc W.  
 8 Dillon, Davin C.  
 11 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE  
 12 TREATMENT AND DIAGNOSIS OF BREAST CANCER  
 15 <130> FILE REFERENCE: 210121.419C7  
 17 <140> CURRENT APPLICATION NUMBER: US/09/534,825A  
 18 <141> CURRENT FILING DATE: 2000-03-23  
 20 <160> NUMBER OF SEQ ID NOS: 317  
 22 <170> SOFTWARE: FastSEQ for Windows Version 3.0  
 24 <210> SEQ ID NO: 1  
 25 <211> LENGTH: 363  
 26 <212> TYPE: DNA  
 27 <213> ORGANISM: Homo sapien  
 29 <400> SEQUENCE: 1  
 30 ttagagaccc aattgggacc taattgggac ccaaatttct caagtggagg gagaacttt 60  
 31 gacgattcc acggtatct cctcgtgggt attcagggag ctgcccagaa acctataaac 120  
 32 ttgtcttaagg cgattgaagt cgtccagggg catgtatgtt caccaggagt gtttttagag 180  
 33 caccctcagg aggcattatcg gatttacacc cctttgacc tggcagcccc cgaaaatagc 240  
 34 catgtctta atttggcatt tggcgtcag gcagccccag atagtaaaag gaaactccaa 300  
 35 aaacttagagg gattttgctg gaatgaatac cagttagctt ttagagatag cctaaaaggt 360  
 36 ttt 363  
 38 <210> SEQ ID NO: 2  
 39 <211> LENGTH: 121  
 40 <212> TYPE: PRT  
 41 <213> ORGANISM: Homo sapien  
 43 <400> SEQUENCE: 2  
 44 Leu Glu Thr Gln Leu Gly Pro Asn Trp Asp Pro Asn Phe Ser Ser Gly  
 45 1 5 10 15  
 46 Gly Arg Thr Phe Asp Asp Phe His Arg Tyr Leu Leu Val Gly Ile Gln  
 47 20 25 30  
 48 Gly Ala Ala Gln Lys Pro Ile Asn Leu Ser Lys Ala Ile Glu Val Val  
 49 35 40 45  
 50 Gln Gly His Asp Glu Ser Pro Gly Val Phe Leu Glu His Leu Gln Glu  
 51 50 55 60  
 52 Ala Tyr Arg Ile Tyr Thr Pro Phe Asp Leu Ala Ala Pro Glu Asn Ser  
 53 65 70 75 80  
 54 His Ala Leu Asn Leu Ala Phe Val Ala Gln Ala Ala Pro Asp Ser Lys  
 55 85 90 95  
 56 Arg Lys Leu Gln Lys Leu Glu Gly Phe Cys Trp Asn Glu Tyr Gln Ser  
 57 100 105 110  
 58 Ala Phe Arg Asp Ser Leu Lys Gly Phe  
 59 115 120  
 61 <210> SEQ ID NO: 3

ENTERED

P.S

RECEIVED

SEP 26 2000

TECH CENTER 1600/2900

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/534,825A  
 DATE: 09/25/2000  
 TIME: 11:22:28

Input Set : A:\419c7.app  
 Output Set: N:\CRF3\09252000\I534825A.raw

62 <211> LENGTH: 1080  
 63 <212> TYPE: DNA  
 64 <213> ORGANISM: Homo sapien  
 66 <220> FEATURE:  
 67 <221> NAME/KEY: misc\_feature  
 68 <222> LOCATION: (1)...(1080)  
 69 <223> OTHER INFORMATION: n = A,T,C or G  
 71 <400> SEQUENCE: 3  
 72 tcttagaatc ttccatcccc gaactcttgg gaaaacttta atcagtccac tacagttcac  
 73 caccattta ggaggagcaa agctacccat gtcctccgg agccgtttta agatccccca 60  
 74 tcttcaagc ctaacagat aagcagctct ccgggtcaca acctgcgc 120  
 75 caaaaaaggc cctaaacccca gcccaggcca cccgtctccaa gaaaactcac caggagaaaa 180  
 76 gtggaaatt gactttacag aagttaaacc acaccgggtt gggtacaata accttcttagt 240  
 77 actgttagac accttctcg tggactga agcatttgc accaaaaacg aaactgtcaa 300  
 78 tagttagtta aagtttttac tcaatggaaat catccctcga cttgggtcgc ctgttgcatt 360  
 79 agggctgtat aatggaaacgg cttccgcctt gtctataggta taatcagtc gtaaggcggtt 420  
 80 aaacattcaa tggaaagctcc atttgtccca tcgacccaga gctctggcga agtagaaacgc 480  
 81 atgaactgca ccctaaaaaa acactttac aaaattaatc taaaaaaccg gtgttaattt 540  
 82 tggtagtctc ctcccttag ccctacttag agttaaaggcgtt cacccttac tgggctgggt 600  
 W--> 83 ttcttaccc ttgttaatcat ntnttnggaat gggctgccta tcttttctta actaaaaaaan 660  
 W--> 84 gcccattttgg caaaaatttc ncaactaatt tntacgtnc tacgtctccc caacaggtn 720  
 W--> 85 aaaaatctnc tggcccttttc aaggaaaccat cccatccatt cttnaacaaa aggcgtccn 780  
 W--> 86 ttcttccccc agtttaactnt tttttnttaa aatttcccaa aaangaacn cctgtggaa 840  
 W--> 87 aaaccccccc ctccaanccc cggccnaagn ggaagggttcc cttgaatccc ncccccnna 900  
 W--> 88 angggccgga acntttaaaan tngtcccnngg gggtnmgc taaaagnccn atttggtaaa 960  
 W--> 89 cctanaaatt ttttctttttaaaaaaccac nnntttntttt ttcttaaaca aaaccctttt 1020  
 91 <210> SEQ ID NO: 4  
 92 <211> LENGTH: 1087  
 93 <212> TYPE: DNA  
 94 <213> ORGANISM: Homo sapien  
 96 <220> FEATURE:  
 97 <221> NAME/KEY: misc\_feature  
 98 <222> LOCATION: (1)...(1087)  
 99 <223> OTHER INFORMATION: n = A,T,C or G  
 101 <400> SEQUENCE: 4  
 102 tcttagatcg cggctggatc cggccacagt gaggagacat gaagaccaga gaaaacacag 60  
 103 caatggcc cttaaacta ctcacccatgttggcttta atttattctg ttttatatttg 120  
 104 ttccatcat tttaagggtt taaaatcatc ttgttccacat ctcagccatc aaaaatgaccc 180  
 105 atctgttagac ctcaggctcc aaccatacc ccaaggttgc ctggttttgt ttaaatatttgc 240  
 106 gccaggtttcc agtgcagat atccctggaa ggaatattcc agatccctg agtagttcc 300  
 107 agtttaaaaat cctataggct tttctgttt tgaggaagag ttccctgtcc agaaaaacat 360  
 108 gattttggat tttaactttt aatgttgcgaa acacgttata aaaaaattt ttttccctta 420  
 109 gcttaaagt actgttagt agaaattaaa attcccttgcgaa gaggattaaat ctggccattc 480  
 110 agttacccta attccaaatg ttttgggtt tagaatcttc tttaatgttc ttgaagaagt 540  
 W--> 111 gttttatattt ttcccatcna gataaatttc ctcncncctt nnntttntt ctntttttt 600  
 W--> 112 aaaacggant ctggctccgt tggccangt gggatattttt ttttggccaa tctccgtnc 660  
 W--> 113 cttgcaanaa ntctgcntcc caaaattacc nccttttcc caccctccccc cccnnggaatt 720  
 W--> 114 acctggaaattt aaaaaaaaaaaaaaaa cggctaaattt gttttttttt ttgttaaaaa 780  
 W--> 115 acgggttcc tgggttttagttt agatggccccc anntctgacc ccntnatcnt cccctcngc 840

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/534,825A

DATE: 09/25/2000  
TIME: 11:22:28

Input Set : A:\419c7.app  
Output Set: N:\CRF3\09252000\I534825A.raw

W--> 116	cctcnaatnt	tnnnnnntang	gcttacccccc	cccnngnngtt	tttcctccat	tnaaattttc	900
W--> 117	tntggantct	tgaatnnccgg	gttttccctt	ttaaaccnat	tttttttttn	nnncccccnn	960
W--> 118	tttncetcc	cccnntntnta	angggggttt	cccaancgg	gtccnccccc	angtcccca	1020
W--> 119	ttttctccc	ccccctctt	ttttcttntc	ccaaaantc	ctatcttttc	ctnnnaaatat	1080
W--> 120	cnantnt						1087
122	<210> SEQ ID NO: 5						
123	<211> LENGTH: 1010						
124	<212> TYPE: DNA						
125	<213> ORGANISM: Homo sapien						
127	<220> FEATURE:						
128	<221> NAME/KEY: misc_feature						
129	<222> LOCATION: (1)...(1010)						
130	<223> OTHER INFORMATION: n = A,T,C or G						
132	<400> SEQUENCE: 5						
133	tcttagaccat	gaaaatggag	gattttagag	tgactgtat	ttttcttata	atctgcagg	60
134	agtaaacatt	ctccacagg	tatgcaaaaa	gtaaacaaac	cactgcagg	gacaaacact	120
135	aggttaacaca	catactatct	cccaaatacc	taccggcaag	ctcaacaatt	ttaaactgtt	180
136	aggatcaactg	gctctaatca	ccatgacatg	aggtcaccc	caaaccatca	agcgctaaac	240
137	agacagaatg	tttccactcc	tgatccactg	tgtgggaaga	agcaccgaa	ttaccggactg	300
W--> 138	ggggggctgc	ntcanaaaaa	aagcccatgc	ccccgggtnt	ncctttnaac	cggaaacgat	360
W--> 139	naacccacca	tccccacanc	tcctctgttc	ntggggctgc	catacttgcgg	cctcntntnc	420
W--> 140	tttnggggan	acntggggaa	ggtacccat	ttcnnntgacc	ccnncanaaa	accccnngtg	480
W--> 141	ccctttggcc	tgatccnt	gggccttcc	tctttccctt	tttgggttgc	ttaaattccc	540
W--> 142	aatgtcccn	gaacccatc	cntntgccc	aaaacccatc	taattnntc	ntangnntt	600
W--> 143	ttcttggtgt	tnctttca	aggttaccc	ncctgttcan	ncccnacnaa	aatttttcc	660
W--> 144	ntatnntgg	cccnnaaaaa	nnnatenncc	cnaatttccc	gaattgggtt	ggtttttctt	720
W--> 145	nctgggggaa	accctttaaa	tttccccc	ggccggcc	cccttttccc	ccctttnnga	780
W--> 146	aggcaggngg	tttcccg	atcttcaatt	ncaacageccn	tgccttattgn	tgaaccctt	840
W--> 147	ttccctaaaat	aaaaaaat	ccgggttngg	nnngccctt	tcctccctng	ngngggngng	900
W--> 148	aaantccctt	ccccnaaaaa	ggttgcttgc	ccccngtcc	ccactcccc	ngggaaaatn	960
W--> 149	aaccccttcn	aaaaaaggaa	tataanttn	ccactcc	tttgcgttcc		1010
151	<210> SEQ ID NO: 6						
152	<211> LENGTH: 950						
153	<212> TYPE: DNA						
154	<213> ORGANISM: Homo sapien						
156	<220> FEATURE:						
157	<221> NAME/KEY: misc_feature						
158	<222> LOCATION: (1)...(950)						
159	<223> OTHER INFORMATION: n = A,T,C or G						
161	<400> SEQUENCE: 6						
162	tcttagagctc	ggggccg	gctctataac	gactcaat	agggcgtcga	ctcgatctca	60
163	gtcactgca	atctctgccc	ccgggg	gtcgatcc	tgccctcagcc	ttccaatgt	120
164	ctgggattac	aggcgtgca	caccac	ggctat	ttttaa	tagatgg	180
W--> 165	gttttccctt	gttggccann	atggcttca	ccccc	tcnnntgatc	cccccnccn	240
W--> 166	ngancttca	ctgtggg	tnncgnnnn	nnncc	tcnnntt	ncncnnntc	300
W--> 167	tnntcttnc	tcnnnnnnnn	cnntcn	nncttctc	cnntntt	cnncnnccn	360
W--> 168	cnncncn	ncncn	tcnnntt	tcnnntt	tcnnntt	tcnnntt	420
W--> 169	cnntacntc	ntnnnnnn	cnntntt	tcnnncn	cnctncn	nttctctc	480
W--> 170	tnnnnnnnct	ccnnnnntct	ntcncn	tcncn	ncncncccc	ncctcncn	540

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/534,825A

DATE: 09/25/2000  
 TIME: 11:22:28

Input Set : A:\419c7.app  
 Output Set: N:\CRF3\09252000\I534825A.raw

W--> 171	ctnatttnnn cncnnntcc ntncnnttc nntccnnnn cnncntcnc nnccntttc	600
W--> 172	cccccnnccc cttncnccn nnntntcnnc cnncntcnc ntthactct nnntccnnnc	660
W--> 173	tcnnttcncc cnntccncc ccccnccnt ctctenccn nnntnnntn nnncntcnc	720
W--> 174	tntcnnttc ntcnntncnt ntntcnnc nnccnntncn nncntntt ctnntcnc	780
W--> 175	tcncntntcn cncntcnnn ctntctcnn ntntcttccc ctcnctnt cttccnccn	840
W--> 176	ccnntntntn tnnccnccn ntnnnncncc cncntttcn tctctnctnn nnntnnccn	900
W--> 177	nnccntncc ctnntncnct ntnntacnn tnctnctccn tcttccttcc	950
179 <210>	SEQ ID NO: 7	
180 <211>	LENGTH: 1086	
181 <212>	TYPE: DNA	
182 <213>	ORGANISM: Homo sapien	
184 <220>	FEATURE:	
185 <221>	NAME/KEY: misc_feature	
186 <222>	LOCATION: (1)...(1086)	
187 <223>	OTHER INFORMATION: n = A,T,C or G	
189 <400>	SEQUENCE: 7	
190	tctagagctc gggccgcga gtcattaa cccactaa agggagtcga ctgcgtcaga	60
191	ctgttactgt gtctatgttag aagaagtag acataagaga ttccatttt ttctgtacta	120
192	agaaaaattt ttctgccttg agatgtgtt aatctgtaac cctagccca accctgtgct	180
193	cacagagaca ttgtgtgtgt tgactcaagg ttcaatggat tttaggtctat gctttgttaa	240
194	aaaatgtgtt gaagataata tgcttgtaa aagtcatcac cattctctaa tctcaagtac	300
195	ccaggagac aatacactgc gaaaggccgc agggacctct gtctaggaaa gccaggatt	360
196	gtccaaagatt ttcctccatgg tgatagectg agatatggcc tcatggaaag gtaaagac	420
197	gactgtcccc cagcccgaca tcccccaagcc cgacatcccc cagcccgaca cccgaaaagg	480
W--> 198	gtctgtgtg aggagatata ntaaaaggagg aaggcttgcattt gcatgtgaat aagaaagg	540
199	ctctgtctcc tgctctgtccc tggcaatata aatgtcttgg tgtaaaccg gaatgtatgt	600
200	tctacttaact gagaatagga gaaaacatcc tttagggctgg aggtgagaca ccctggccgc	660
W--> 201	atactgtctt ttaatgcacg agatgtttgt ntaattgcac tccaggccca nccctttcc	720
W--> 202	ttaactttt atgacaaatc aactttgttcc nctttctctg cgaacccttc cccctattan	780
W--> 203	cctattggcc tggccatcccc tcccccaan ggtgaaaana tgttcncaa tncgaggaa	840
W--> 204	tccaaaacnt ttccctgttgc tggcccttcc caaccccgctc ctggccmn tttccctccc	900
W--> 205	aacntgtcccc ggtcccttcn ttcccccnc cttccengan aaaaacccc gtgtganggn	960
W--> 206	gccccctcaa attataaccc ttccnaaaca aannngttcn aaggtgggtt gnttccgg	1020
W--> 207	cggtctggccct tgagggtcccc cctncaccccc aatttggaaan ccngttttt ttattgccc	1080
W--> 208	ntcccc	1086
210 <210>	SEQ ID NO: 8	
211 <211>	LENGTH: 1177	
212 <212>	TYPE: DNA	
213 <213>	ORGANISM: Homo sapien	
215 <220>	FEATURE:	
216 <221>	NAME/KEY: misc_feature	
217 <222>	LOCATION: (1)...(1177)	
218 <223>	OTHER INFORMATION: n = A,T,C or G	
220 <400>	SEQUENCE: 8	
W--> 221	nnccntttaga tggtgacaan ntaaaacaagc ngctcaggca gctgaaaaaa gccactgata	60
222	aagcatccctg gaggatcaga gtttactgtt agatcagcc tatttgcattt cccctccac	120
223	atgggtttta aatccagcta cactacttcc tgactcaaac tccactatcc ctgttcatga	180
224	ctgtcaggaa ctgttggaaa ctactgaaac tggccgaccc gatcttcaaa atgtccct	240
W--> 225	aggaaaagggtg gatgccaccc tgttcacaga cagttaccncc ttccctcgaga agggactac	300

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/534,825A

DATE: 09/25/2000  
TIME: 11:22:28

Input Set : A:\419c7.app  
Output Set: N:\CRF3\09252000\I534825A.raw

W--> 226	agggggccgt	gcanctgtta	ccaaaggagac	tatgtgttg	tgggctcagg	ctttaccanc	360
W--> 227	aaacacettca	ncncnnaagg	ctgaattgt	cgcctcaact	caggcttcgg	gatggggtaa	420
228	ggatattaa	cgttacact	gacagcgggt	acgcctttgc	tactgtgcat	gtacgtggag	480
W--> 229	ccatctacca	ggagcgtggg	ctactcactc	ggcaggtgac	tgtnatccac	tgtaaangga	540
W--> 230	catcaaaagg	aaaacnngc	tgttgcgcgt	ggtaaccana	aanctgaten	ncagctcnaa	600
W--> 231	gatgctgtgt	tgactttcac	tcncncctt	taaaacttgct	gccccacantc	tcctttccca	660
W--> 232	accagatctc	ectgacaatc	ccccactca	aaaaaaaaaa	aanactggcc	ccgaaccena	720
W--> 233	accataaaaa	acggggangg	tngtnganc	nnccgtaccc	aaaataatg	gatccccgg	780
W--> 234	gctgcaggaa	tccaaattcan	ccttatcna	accccaacn	nggnnggggg	ggccngtnc	840
W--> 235	cattnccct	ntattnattc	tttnnccccc	ccccggcmt	cctttttnaa	ctcgtgaag	900
W--> 236	ggaaaacccgt	ntttaaccaan	ttatcnccct	gaccnccccc	tcccnccgt	gnnttanaaaa	960
W--> 237	aaagccccnc	antcccncc	naatattgc	cngaaaggna	aggaattttaa	cctttatattt	1020
W--> 238	tttntccctt	antttgtnnn	cccccttta	ccccaggcga	cngccatent	ttaanaaaaa	1080
W--> 239	aaanagaang	tttatttttc	cttngaaacc	tccaaatana	aancacccgc	ngggaaacgg	1140
W--> 240	ggnggnaggc	cnctcacccc	cttntgtng	nggggncc			1177
242 <210>	SEQ ID NO:	9					
243 <211>	LENGTH:	1146					
244 <212>	TYPE:	DNA					
245 <213>	ORGANISM:	Homo sapien					
247 <220>	FEATURE:						
248 <221>	NAME/KEY:	misc_feature					
249 <222>	LOCATION:	(1)...(1146)					
250 <223>	OTHER INFORMATION:	n = A,T,C or G					
252 <400>	SEQUENCE:	9					
W--> 253	ncnnntttnt	gatgttgtct	ttttggata	ctttccctct	cttcagaggt		60
254	ggaaaagggtc	aaaaggagct	gttgcacgtc	atcccagggt	ggccaatgtg	tccagagtag	120
255	agactccatc	agtgggtca	aaggctgggg	cttttcaggg	aaggaggat	tatgggttt	180
256	ccaaattatac	aagtccaaag	tagaaagaag	ggacataaacc	cggaaagggg	gtggagact	240
257	catcaccccg	aggggacttgc	gcctctctca	gtggtagtag	aggggctact	tcctccacc	300
W--> 258	acgggttgc	ccaaaggaggca	atgggtgatg	agcctacagg	ggacatanc	gaggagacat	360
259	ggggatgacc	taaggagata	ggctgggttt	aaggccgttgc	gactgggtg	ggggaaactct	420
260	accccttttcc	agagagaagc	agtcacagggc	gagctgaacc	ggtcgaaat	cgaggcgaaa	480
261	acacggcttc	gcttcggaa	acccttggaa	taaaattatc	aatgtgtcat	aatgtggacc	540
262	atggaaagggg	tgcctctgac	caaactcagc	cattgtatca	tgttagggaa	actgtatcagg	600
263	gaagccggga	atttcaatc	caacccgc	cacagctg	acattgtgag	gttcagtgc	660
W--> 264	ccttcagg	cccaacttcc	tccaaacttgc	tttgcnaat	ttccaaact		720
265	cttctttttta	aggccgaatc	cntantccct	naaaaacnaa	aaaaaatctg	cnccctattct	780
W--> 266	ggaaaaggcc	canccttac	caggctggaa	gaaattttnc	ctttttttt	tttttgaagg	840
W--> 267	cttttttttaa	attgaacctn	aattcnccct	ccccaaaaaa	aaaccnccng	gggggcggat	900
W--> 268	ttccaaaac	naattccctt	acccaaaaaa	aaaaccnc	cettnttccc	ttccnccctn	960
269	tttttttaat	tagggagata	tnaaggcccc	caatttccng	gnctngattn	gtttcccccc	1020
W--> 270	ccccccatttt	ccnaaacttt	ttcccanca	ggaaanccnc	ctttttttng	gtcnngattna	1080
W--> 271	ncaaccttcc	aaaccatttt	tccnnnaaaa	nttngtng	ngggaaaaan	acctnnnttt	1140
W--> 272	atagan						1146
274 <210>	SEQ ID NO:	10					
275 <211>	LENGTH:	545					
276 <212>	TYPE:	DNA					
277 <213>	ORGANISM:	Homo sapien					
279 <400>	SEQUENCE:	10					

FYI

**Please Note:**  
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

**VERIFICATION SUMMARY**  
 PATENT APPLICATION: US/09/534,825A

DATE: 09/25/2000  
 TIME: 11:22:29

Input Set : A:\419c7.app  
 Output Set: N:\CRF3\09252000\I534825A.raw

L:83 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
 L:84 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
 L:85 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
 L:86 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
 L:87 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
 L:88 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
 L:89 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
 L:111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
 L:112 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
 L:113 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
 L:114 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
 L:115 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
 L:116 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
 L:117 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
 L:118 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
 L:119 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
 L:120 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
 L:138 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
 L:139 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
 L:140 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
 L:141 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
 L:142 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
 L:143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
 L:144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
 L:145 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
 L:146 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
 L:147 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
 L:148 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
 L:149 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
 L:165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
 L:166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
 L:167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
 L:168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
 L:169 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
 L:170 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
 L:171 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
 L:172 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
 L:173 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
 L:174 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
 L:175 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
 L:176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
 L:177 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
 L:198 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
 L:201 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
 L:202 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
 L:203 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
 L:204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
 L:205 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/534,825A

DATE: 09/25/2000

TIME: 11:22:29

Input Set : A:\419c7.app

Output Set: N:\CRF3\09252000\I534825A.raw

L:206 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7

L:207 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7